

REMARKS/ARGUMENTS

I. Introduction:

Claims 1, 5, 9, 13, and 17-20 are amended and new claim 25 is added herein. With entry of this amendment, claims 1-25 will be pending.

The courteous telephone interview granted applicants' undersigned attorney by Examiner Ian Moore on November 14, 2006 is hereby respectfully acknowledged. The proposed amendment presented to the Examiner and arguments presented in the interview are set forth below.

II. Specification:

The specification has been amended to refer to the issued U.S. Patents corresponding to the U.S. Patent Applications listed on page 1 of the specification.

III. Claim Rejections – 35 U.S.C. 103:

a. First Set of Rejections

Claims 1-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,333,937 (Ryan) in view of U.S. Patent No. 6,847,635 (Beser).

Ryan is directed to an access retry method for shared channel wireless communication links. Each remote station in a wireless network cell counts the number of retries attempted to gain access to a base station for a particular message. The base station runs a channel allocation manager program that provides additional channels to the remote station based on the number of retries the remote station required to successfully transmit the access request message.

Ryan does not disclose receiving an exclusive assignment to a toneset in response to detection of an inactive period and prior to transmitting an access request, as set forth in amended claim 1. In contrast, Ryan allocates channels upon receiving an access request message which specifies the number of retries attempted by the remote station. The allocation is made in response to the number of retries made for an access request. During an inactive period, there would be no collisions or retries, therefore, the base station would not need to allocate any channels to the remote station. The object of Ryan is to provide the base station with accurate information about reduced performance that remote stations suffer during an interval of high usage and not during an inactive period.

Beser discloses a method to transmit silence compressed voice over IP efficiently in DOCSIS cable networks. When a cable modem detects no voice activity from a subscriber, a CMTS stops providing the periodic stream of time slots. When voice activity for the subscriber resumes, the cable modem requests the stream of time slots, and resumes transmission. Conventional systems such as Beser, which provide dedicated access request slots that are allocated to inactive service flows, use bandwidth that is then unavailable for other services. Each inactive call supported by the network adds to this access request overhead since the subscriber units do not share these access request slots.

As previously discussed, the objective of the invention of Ryan is to provide a base station with accurate information about reduced performance based on a high number of retries at a remote station to enable the base station to provide additional channels to the remote stations. During a silent period, there are no requests sent to the base station, thus there is not a problem with reduced performance, and no reason to provide additional channels. Adding channels during a silent period would make the problem of unavailable bandwidth worse. Furthermore, there is no reason to supply additional channels following a silent period because it is not known if there is reduced performance since requests are not sent during the silent period. As such, the proposed modification of Ryan with reference to Beser would defeat the primary functionality of the Ryan method.

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Accordingly, claim 1, as amended, is submitted as patentable over Ryan and Beser.

Claims 2-4 and 21-25 each depend directly or indirectly from independent claim 1 and are, therefore, each believed to be allowable over Ryan and Beser for at least the reasons set forth above with respect to claim 1. Each of these dependent claims recite additional limitations which, when considered in light of claim 1, are believed to further distinguish the claimed invention over the art of record.

Independent claim 5 recites a method for operating a central access point which includes sending an exclusive assignment to a toneset within an OFDM burst structure to a selected subscriber unit, and receiving an access request OFDM burst that includes the toneset as transmitted from the selected subscriber unit. Claim 5 is submitted as patentable for the reasons discussed above with respect to claim 1.

Claims 6-8 each depend directly from independent claim 5 and are, therefore, each believed to be allowable over Ryan and Beser for at least the reasons set forth above with respect to claim 5.

Claims 9, 17, and 19, and the claims depending therefrom, are believed to be allowable over the cited art for at least the reasons set forth above with respect to claim 1.

Claims 13, 18, and 20, and the claims depending therefrom, are believed to be allowable over the cited art for at least the reasons set forth above with respect to claim 5.

b. Second Set of Rejections

Claims 1-24 stand rejected under 35 U.S.C. 103(a) as being anticipated by U.S. Patent No. 6,628,673 (McFarland et al.) in view of Beser.

McFarland et al. disclose a scalable communication system using overlaid signals and multi-carrier frequency communication. Simple low data rate nodes are allowed to use a small number of sub-channels while more complicated nodes use the remainder.

Neither McFarland et al. nor Beser disclose receiving an exclusive assignment to a toneset within an OFDM burst structure in response to detection of an inactive period and prior to transmitting an access request, as set forth in amended claim 1.

Rather than making an exclusive assignment to a toneset, McFarland et al. assign a group of channels to a number of nodes, based on data rates and functions of the nodes. For the reasons discussed above, Beser does not overcome the deficiencies of McFarland et al.

Accordingly, claim 1 is submitted as patentable over McFarland et al. and Beser.

Claims 2-4 and 21-24 each depend directly or indirectly from independent claim 1 and are, therefore, each believed to be allowable over McFarland et al. and Beser for at least the reasons set forth above with respect to claim 1. Each of these dependent claims recite additional limitations which, when considered in light of claim 1, are believed to further distinguish the claimed invention over the art of record.

Independent claim 5 recites a method for operating a central access point which includes sending an exclusive assignment to a toneset within an OFDM bust structure to a selected subscriber unit, and receiving an access request OFDM burst that includes the toneset as transmitted from the selected subscriber unit. Claim 5 is submitted as patentable for the reasons discussed above with respect to claim 1.

Claims 6-8 each depend directly from independent claim 5 and are, therefore, each believed to be allowable over McFarland et al. and Beser for at least the reasons set forth above with respect to claim 5.

Claims 9, 17, and 19, and the claims depending therefrom, are believed to be allowable over the cited art for at least the reasons set forth above with respect to claim 1.

Claims 13, 18, and 20, and the claims depending therefrom, are believed to be allowable over the cited art for at least the reasons set forth above with respect to claim 5.

IV. Conclusion:

For at least the foregoing reasons, Applicants believe that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,



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